What is claimed is:

1. A constant velocity universal joint which comprises:

an outer race having a spherical inner surface, said spherical inner surface having a plurality of track grooves defined therein, each of said track groove in the outer race having a groove bottom of a longitudinal sectional shape representing a shape of a curve;

an inner race having a spherical outer surface and positioned inside the outer race, said spherical outer surface having a plurality of track grooves defined therein in correspondence with the respective track grooves in the outer race, each of said track groove in the inner race having a groove bottom of a longitudinal sectional shape representing a shape of a curve;

a plurality of balls interposed between the outer and inner races and rotatably accommodated between the mating track grooves in the outer and inner races;

a retainer having a plurality of pockets accommodating therein the corresponding balls, said retainer having a spherical outer surface, held in surface contact with the spherical inner surface of the outer race, and a spherical inner surface held in surface contact with the spherical outer surface of the inner race;

each of said track grooves in the outer race having a center of curvature lying in an axial section of the outer race; and

each of said track grooves in the inner race having a center of curvature lying on an axial section of the inner race, said center of curvature of each track groove in the outer race and said center of curvature of each track groove in the inner race being offset an equal distance leftwardly and rightwardly with respect to an angle center of the universal joint;

wherein said spherical inner surface of the outer race or each of the track grooves in the outer race, or both of the spherical inner surface of the outer race and each of the track grooves in the outer race, is or are defined by a post-hardening cut surface.

2. The constant velocity universal joint as claimed in Claim 1, wherein said spherical outer surface of the inner race or each of the track grooves in the inner race, or both of the spherical outer surface of the inner race and each of the track grooves in the inner race, is or are defined by a post-hardening cut surface.

3. The constant velocity universal joint as claimed in Claim 1 , wherein of the spherical outer surface, the spherical inner surface and the pockets, at least the pockets have respective inner surfaces which are defined by a post-hardening cut surface.

4. The constant velocity universal joint as claimed in Claim 1 , wherein the constant velocity universal joint is for use with a propeller shaft.

5. The constant velocity universal joint as claimed in Claim 4, wherein the outer race has an inlet mouth and a rear opening opposite to the inlet mouth and having a diameter smaller than a diameter of the inlet mouth, said outer race also having a fitting flange formed therewith at a location radially outwardly of an outer periphery of the inlet mouth and a cylindrical mount formed therewith so as to protrude axially outwardly from the opening, wherein the propeller shaft extends through the rear opening and is then engaged with the inner peripheral surface of the inner race.

6. The constant velocity universal joint as claimed in Claim 1 , wherein the number of the track grooves in each of the inner and outer races is eight.

7. The constant velocity universal joint as claimed in Claim 1 , wherein a surface of at least the retainer is formed with a surface treatment layer for reducing a frictional resistance.

8. The constant velocity universal joint as claimed in Claim 7, wherein the surface treatment layer is a film of a solid lubricant.

9. The constant velocity universal joint as claimed in Claim 7, wherein the surface treatment layer is a low temperature sulfurized layer.

10. The constant velocity universal joint as claimed in Claim 1 , wherein each of the track grooves in each of the inner and outer races and the

corresponding ball cooperate to define radial gaps therebetween, each of said radial gap being of a size not greater than 0.05 mm.

11. The constant velocity universal joint as claimed in Claim 1 , wherein each of the pockets in the retainer and the corresponding ball accommodated therein cooperate to define axial gaps, each of said axial gaps being positive.

12. The constant velocity universal joint as claimed in Claim 1 , wherein each of the track grooves in the outer race has a transverse sectional shape that is oval.

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